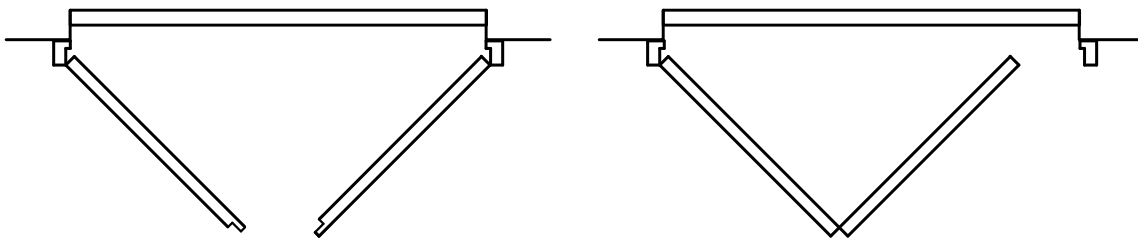


## Standard Shutters

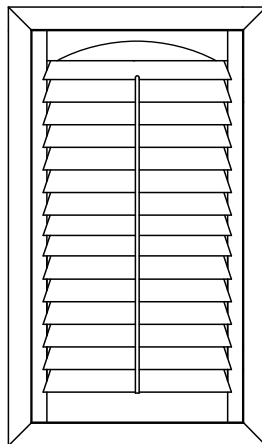
Sunland Shutters builds all panels so that the **top rail** and the **bottom rail** are as close to the **same size** as possible. When ordering adjacent shutters in the same room, to achieve uniform appearance (divider rails and louver numbers) you must specify that all adjacent shutters and their divider rails be built exactly the same height. If the measurements of the shutters differ slightly, apply one of the three options (keeping in mind that adjacent shutters and their divider rails must always be ordered exactly the same height):

- 1) For outside mounts, increase the ordered height of the smaller shutters to equal the taller shutters.
- 2) For inside mounts with Z frames, reduce the ordered height of the taller shutters to equal the smaller shutters.
- 3) For inside mounts with height differences of ½” or more, change to an outside mount.

Standard rectangular shutters can consist of one or more panels hinged in a variety of configurations. Single panels can be individually hinged, or two panels may be hinged together in a bi-fold design. All bi-fold panels are butted together and have a butterflyed butt hinge attached on the back of the stiles. Maximum width for 2 panels bi-fold, 2L or 2R is 42” on Polycore, 48” on Lexwood. Premium / Advantage / Plus.



Remember, because of the unprecedented panel height we recommend panels over 96” in height to have a divider rail so that louvers will not need to be hand pressed to close. Panels over 96” in height will require a divider rail to ensure structural integrity.

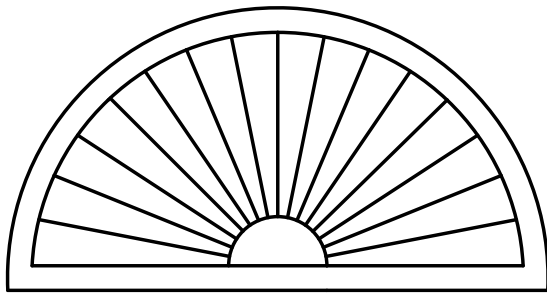


\* Liberty panel is available upon request  
(Lexwood Premium, Advantage & Plus)  
with surcharge

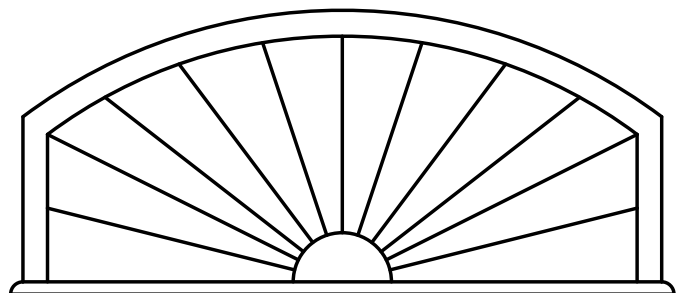
## Fan Top Shutters

Fan top shutters show shutters in their best light. Either alone or on top of a rectangular shutter, fan top shutters provide the finishing touch to any decorating scheme. Fan top shutters are manufactured in the frame of your choice. The movable louvers are connected from the hub directly into the frame. These fan top shutters are generally attached to the opening permanently. In order for them to be removable they will need to be installed with magnets or button catches. Fan top shutters are available as a ½ circle or as an eyebrow. The bottom of the fan top shutter can be manufactured as bottom with frame or bottom with a base.

Note: The base extends past the width of the frame.

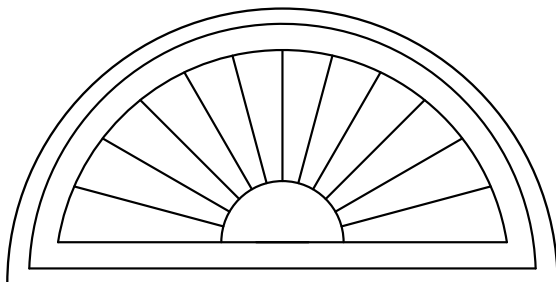


½ circle shutters as bottom with frame

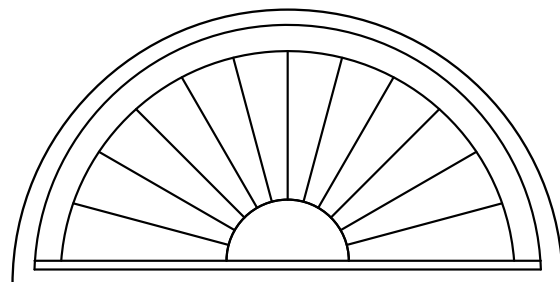


Eyebrow shutters as bottom with base

If you require a flat frame fan top shutter with a wrap around frame, it is always magnet mount and there is a surcharge.



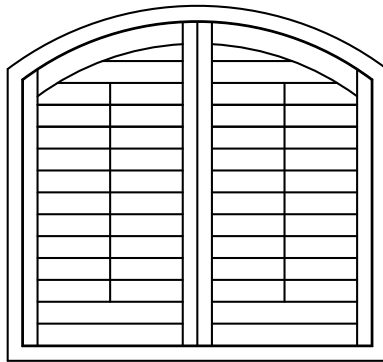
Sunburst Bottom with Frame



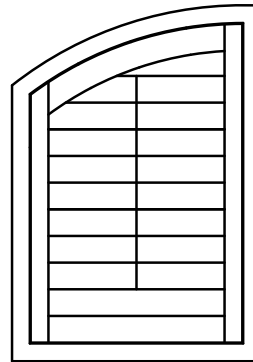
Sunburst Bottom with Base

## Arch Shutters

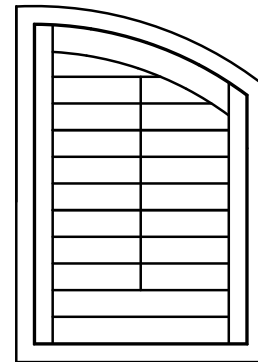
Arch shutters are another way to cover an arched opening. The shutter panels are manufactured with a curved top rail to conform to the desired opening. They are available as a full circle or an eyebrow. We provide a full frame on all arch shutters. Hidden Tilt rod cannot reach the louvers in the top arch area on a single panel arch. These unreachable louvers will be connected with a tilt rod in the back as spare operating control.



2 Panel Arch

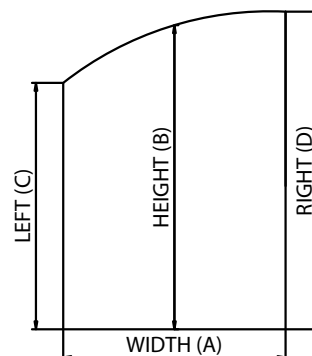
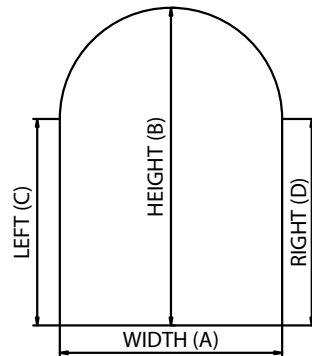


½ Arch-left



½ Arch-right

Please provide the width, overall height, and shoulder heights on each side.



### Arch Shutter Template Requirement

All arch top shutter orders without template will be manufactured as half circle or continuous slope.

If the arch shutter ordered is not a half circle or continuous slope, **Cutout** template is required for manufacturing purpose. Two templates are recommended, one for Sunland Shutters and one for the dealer's records. Marked lines on templates are not acceptable to avoid mis-line determination only cutout templates should be sent.

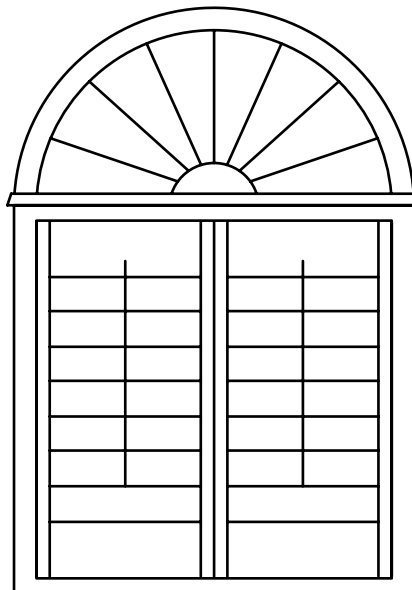
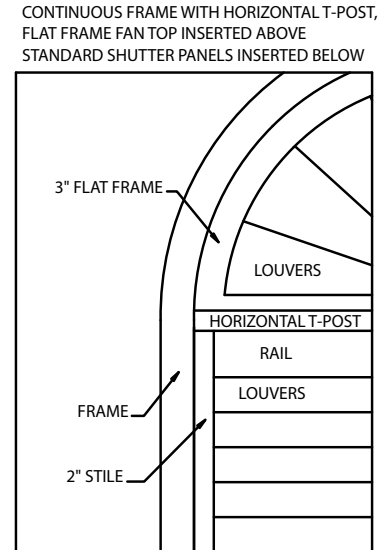
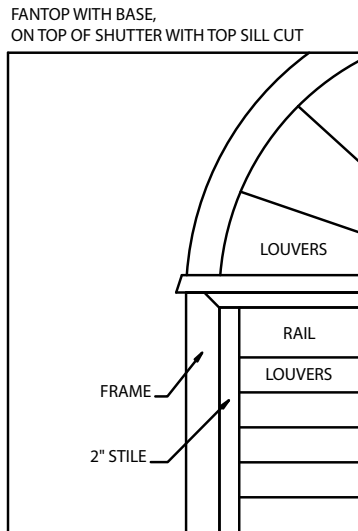
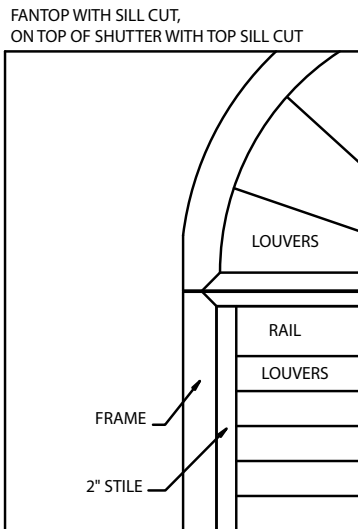
All orders that require a template must MAILED IN with the order form (via USPS or UPS or Fed Ex) for that opening with the template attached. Sunland Shutters will not accept any order for openings requiring a template via online order or fax order.

Orders that have openings requiring templates—that ENTIRE order should be submitted via PHYSICAL MAIL along with the associated templates. Order where only 1 or 2 openings require templates—the openings that DO NOT require templates should be submitted online or via fax. The 1 or 2 openings requiring templates should be submitted via PHYSICAL MAIL. Please make sure the side mark is the same on both submissions.

Mail Instruction: Sunland Shutters 5855 Obispo Ave. Long Beach, CA 90805 Attention: Design – Template

Arched openings can also be covered using a standard shutter with a fan top mounted on top. There are three ways of accomplishing this: Using separate frames with a base, using separate frames without a base, and using a continuous frame. For an example of each please see the diagrams below.

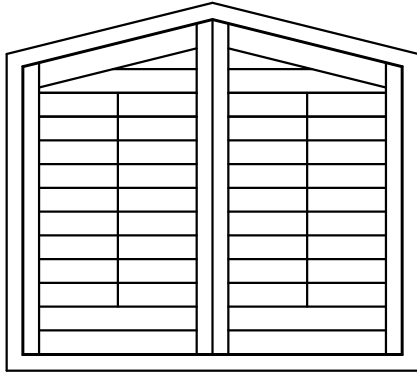
\*There is a **surcharge for the continuous frame.**



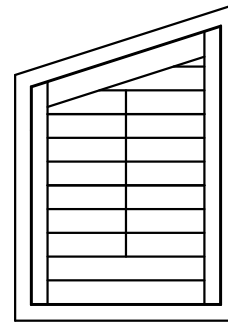
(A complete fan top shutter using separate frames with a base)

## Rake Shutters

Raked top shutters, are shutters that have a straight angled top. The shutters are manufactured with an angled top rail to conform with the opening. We provide a full frame on all rake shutters.

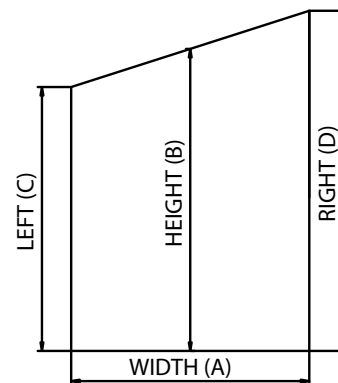
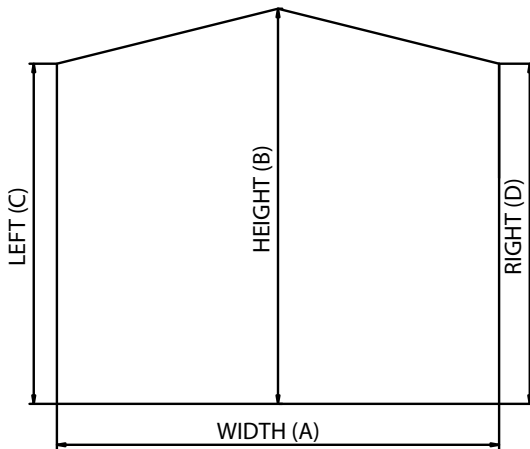


Rake



1/2 rake-left

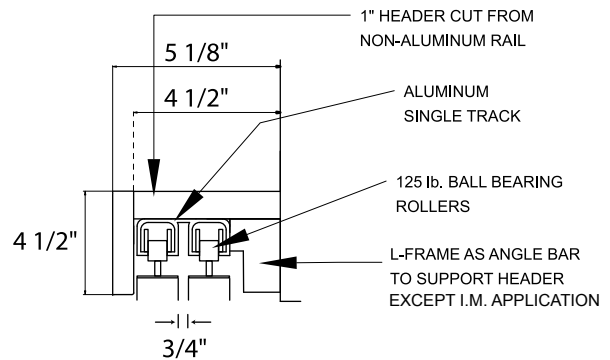
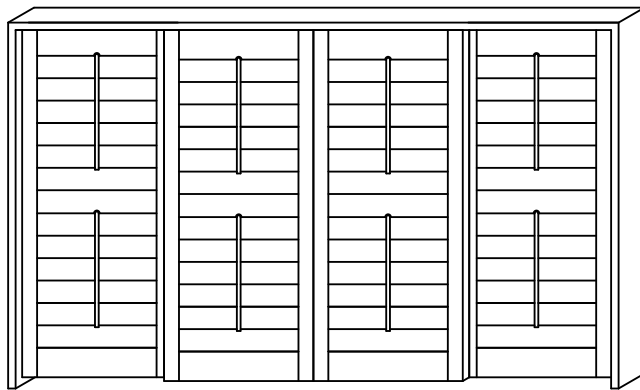
Rake shutters require the same dimensions as an arched shutter. Please provide the width, height, and height of both the left and right sides.



## Track System

### By-pass track

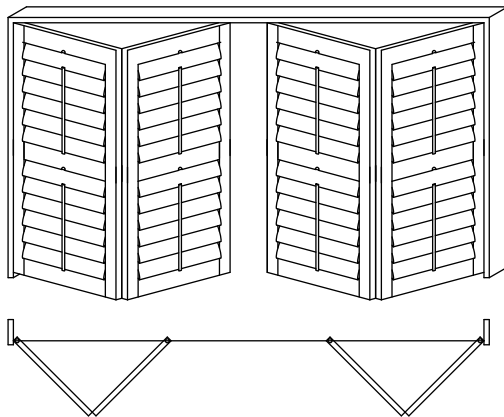
When two or more panels on an overhead track slide past each other, it is called a by-pass track system. Two single tracks are required so that the panels can slide past each other. When sliding past another panel, **the louvers must be closed**. If the panel width exceeds 38", two panels will be hinged together on the back with butt hinges and move as one piece. Rabbed stile are used where the two panels meet in a center opening unit. The top fascia is 4 1/2". The rollers hold up to 125 lbs. per roller. The header and side legs are made out of 1" rail material. A 1 1/2" overlap for panels is built into all by-pass shutters. A 5/8" floor clearance is also provided. Corner fascias (return) are included on O.M. and N.W.F. order only. Bottom runner is included on all 2-way track applications. These runner pieces are meant to keep the panels apart so that the tilt rods do not interfere with the movement of the panels, as well as keep the panels together.



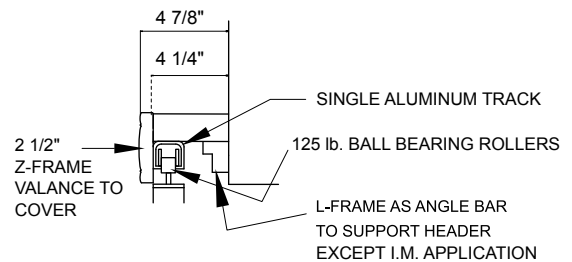
Side Fascia to Cover Side Legs  
← 1 5/8" Side Fascia

### Bi-fold track

When two or more panels are hinged together to fold up adjacent to each other, they are called bi-fold panels. A single track system is used for Bi-fold track system. Panels must be hinged together in multiples of two. The top fascia is 2 1/2", the same as Medium Z-frame. The header and side legs are made of 1" rail material. A standard 1" floor clearance is also provided and cannot be modified. Corner fascias are included on O.M. and N.W.F. orders only.



**Max Panel width is 25"**



WE DO NOT RECOMMEND 6 PANELS CONFIGURATION.



All fascia over 8' (= 96") are provided in two pieces with 45 degree miter joint for both Polycore and Lexwood.

## French Door

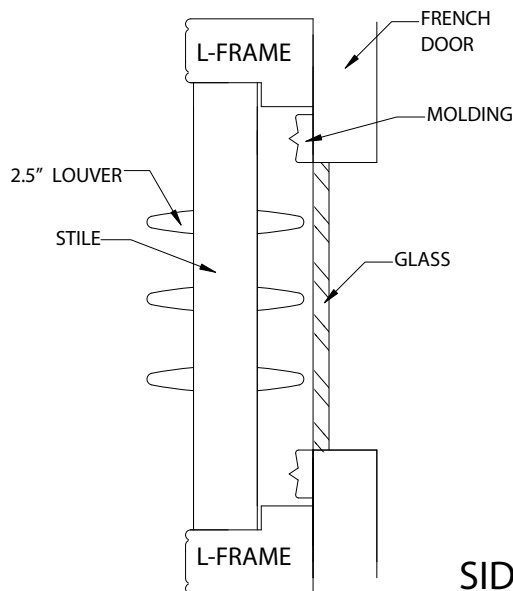
The french door cut out shutter is an excellent way to cover a difficult situation. French doors come with or without molding. If molding is present the shutter will need to be built around it to ensure error free operation. Remember, a build out is often needed for French door applications so the louvers will not come into contact with the glass. Study the diagrams below to find the application that is right for you. We recommend the L-frame as the best frame for french doors because of its appearance, mounting type, and ease of adding build out.

### Build out

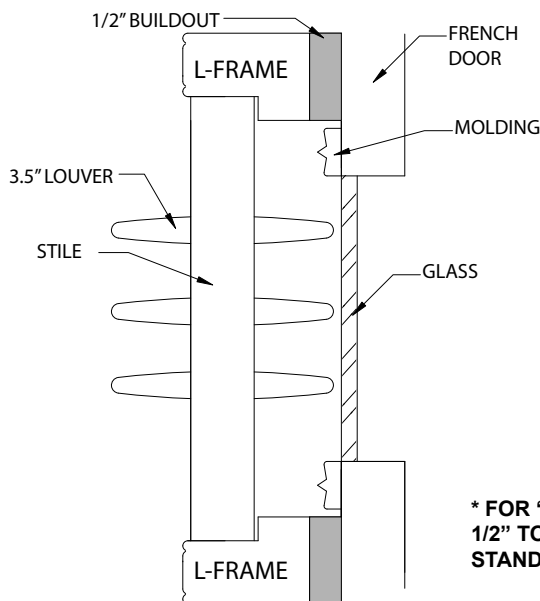
- 2.5 louver → no build out
- 3.5 louver → 1/2" build out
- 4.5 louver → 1" build out

French Door with Molding

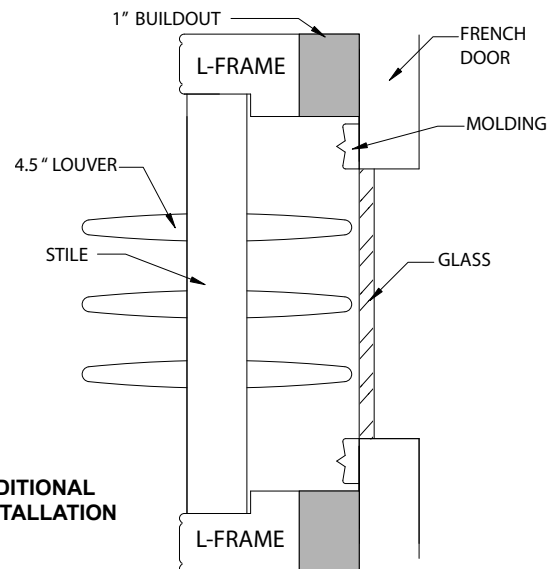
### SIDE VIEW



### SIDE VIEW



### SIDE VIEW

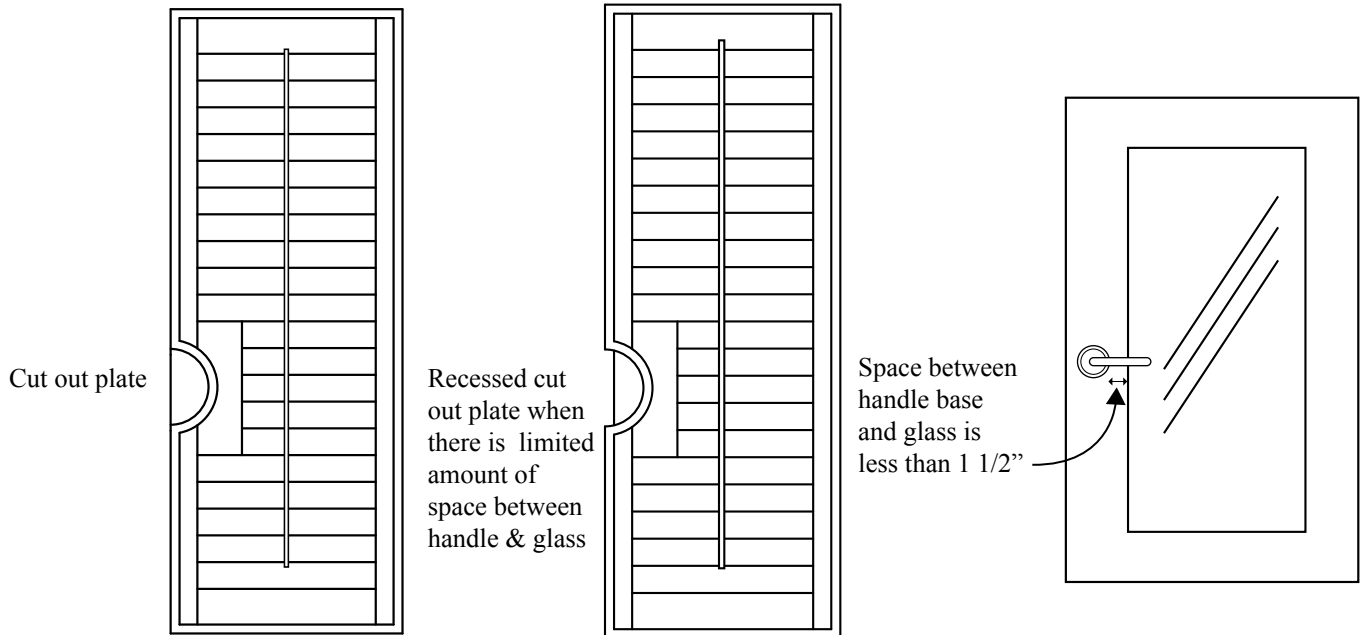


**\* FOR "HIDDEN TILT" ADD AN ADDITIONAL 1/2" TO LOUVER CLEARANCE INSTALLATION STANDARD OPENING.**

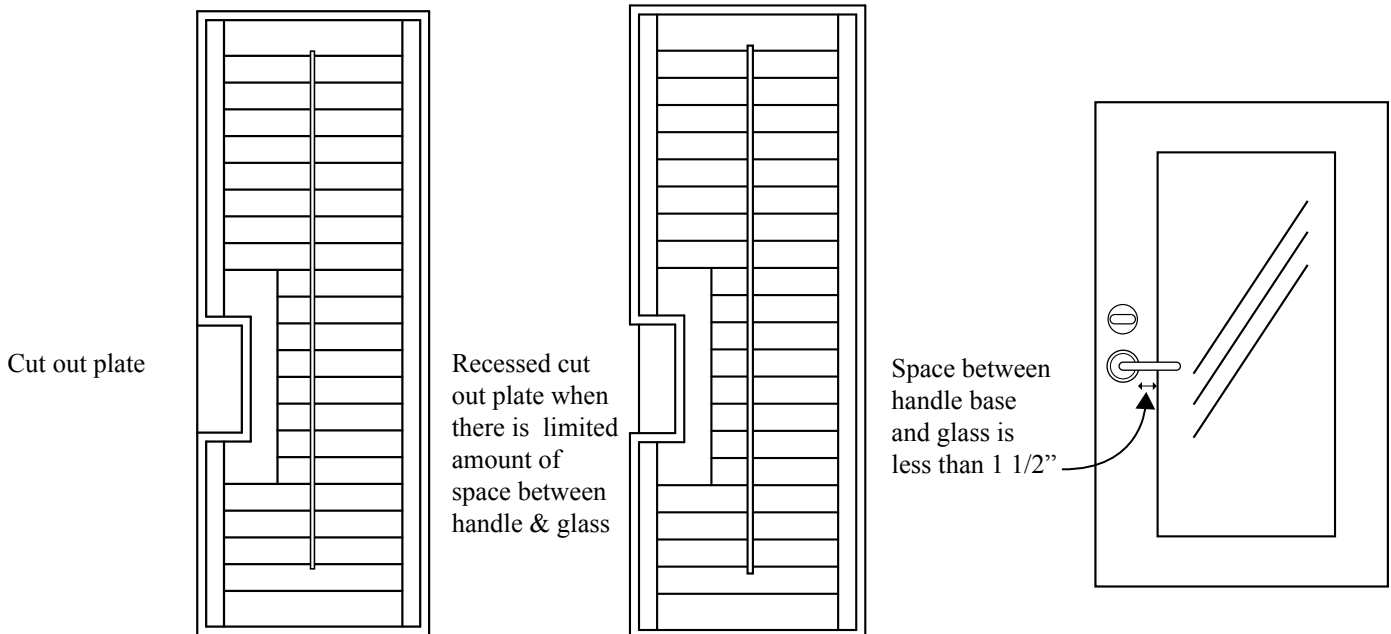
## French Door with Cut Out

French doors occasionally come with a lever type of handle which protrudes into the glass section of the door. In these situations, the French door will need a cut out. We offer a half circle and rectangular cut out. Typically a standard 4 1/4" half circle cut out is enough to accommodate most levers, though we also offer a 5 1/4" and 6 1/4". Study the diagrams below to find your particular application.

### Half circle cut out



### Rectangular cut out



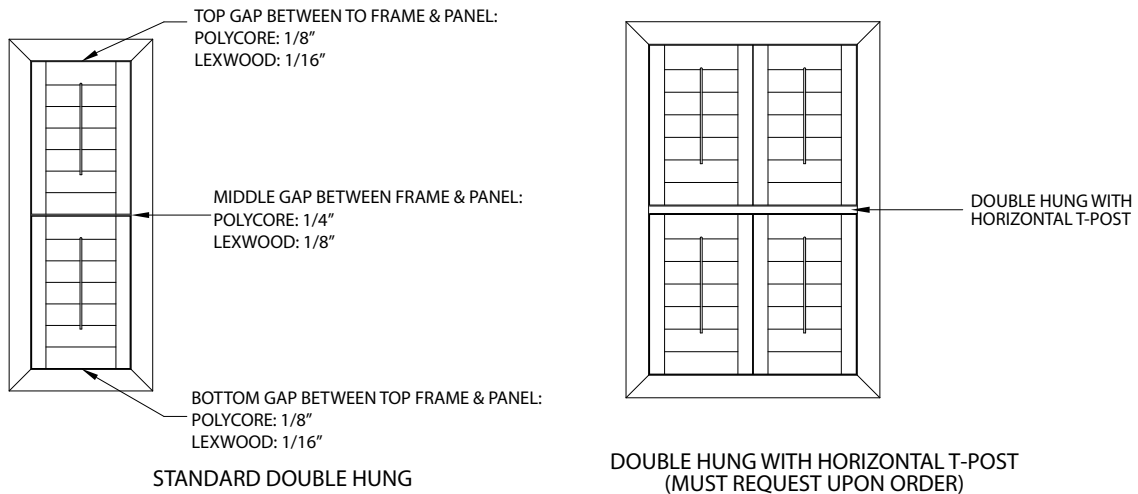
The cut out plate is 1/2" thick. Custom cut outs are available (such as an oval) with a surcharge.



## Double Hung

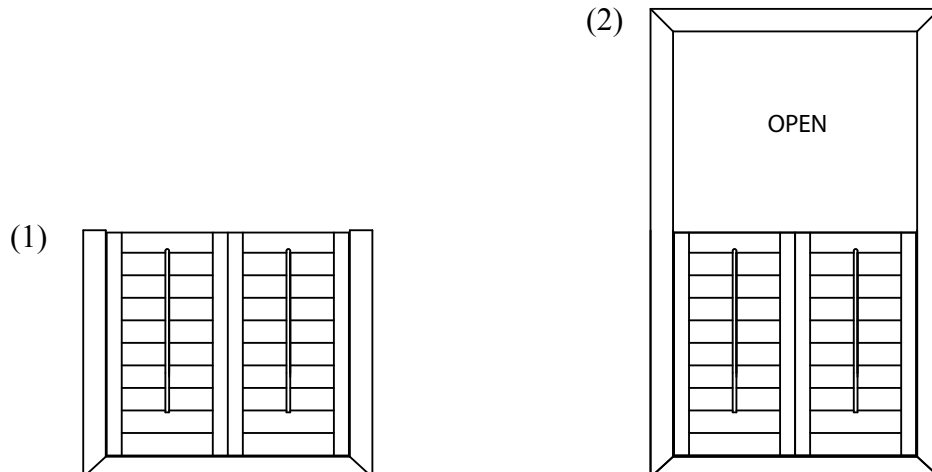
Double hung is when there is continuous frame and multiple panels vertically hinged to it. Customers to decide where the break point locates vertically and to be made with or without a horizontal T-post. A standard double hung has top and bottom panel tiers, operate individually and does not have a horizontal T-post. A double hung with horizontal T-post shutter comes with a horizontal T-post that goes across top and bottom panel tiers. You can choose either a 1” standard T-post or a 1 3/4” large T-post.

Double hung shutters must be designed the panel height greater than the panel width due to leverage factor. We highly recommend a bifold (2L2R) double hung shutter with 4-sided frame and should be ordered with a height dimension more than the width to avoid sagging. There is a surcharge for double hung shutters.



## Café Style

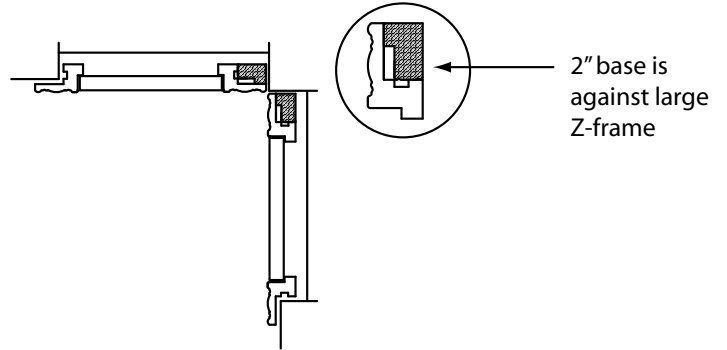
Café Style is a standard panel configuration in which a window opening has shutters on the bottom half, and the top half is left open. The café style shutter can have either an (1) inverted three-sided frame (top will have a smooth finish) or a (2) four-sided frame with the top section open (**with a surcharge**).



## Corner Windows

There are two ways to install shutters on corner windows. The most popular frame is the large Z-frame.

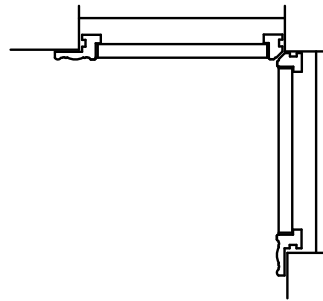
Measure the width of each opening. The factory will take a deduction for the frame and will provide a filler strip to support the back of the frame.



### Corner window with frame cut

Measure the width of each opening. The frames will be miter cut in our factory so that the corners of the two will meet. We do not recommend the Malibu Z-frame for this application.

**There is an additional charge for the miter cut.**



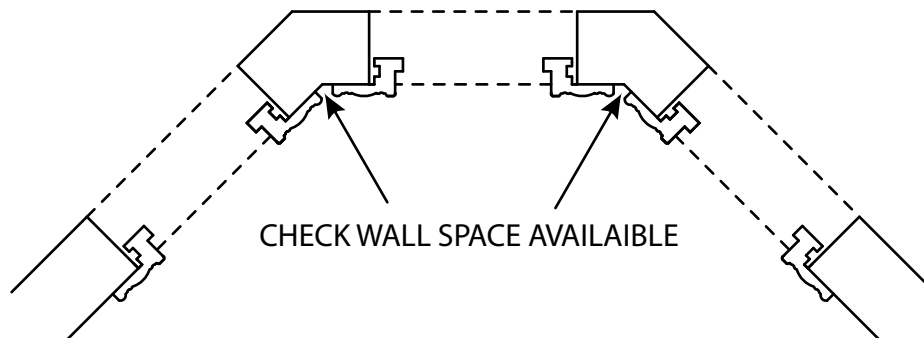
## Bay Windows

Bay windows present interesting options for shutter installations. Choosing the proper installation provides the best insurance against unforeseen problems.

From experience we have learned that walls at the top of bay or bow windows are rarely plum and parallel with those at the bottom. As a result, the best and easiest installation is a semi-inside mounted Z-frame. The return flange allows for most out of plumb openings.

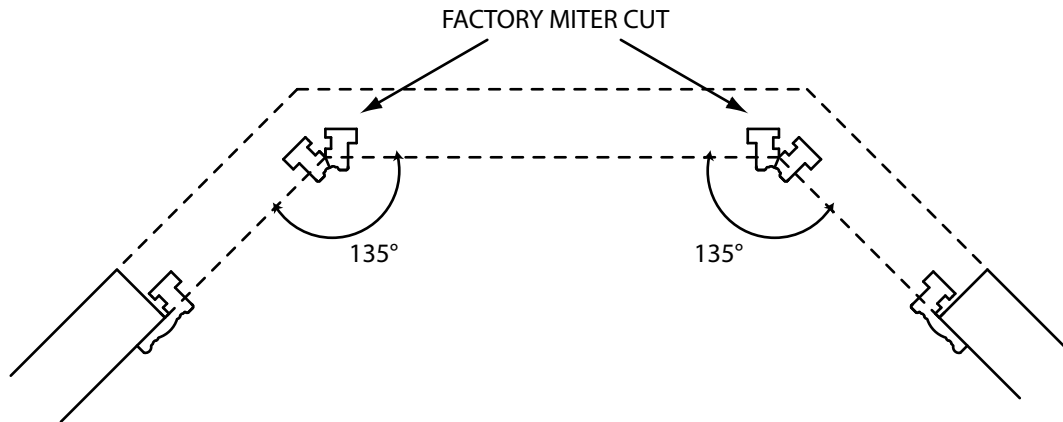
If wall space is available, bay windows can be framed just like a normal window opening.

### Bay window with Z-frame semi-inside mount

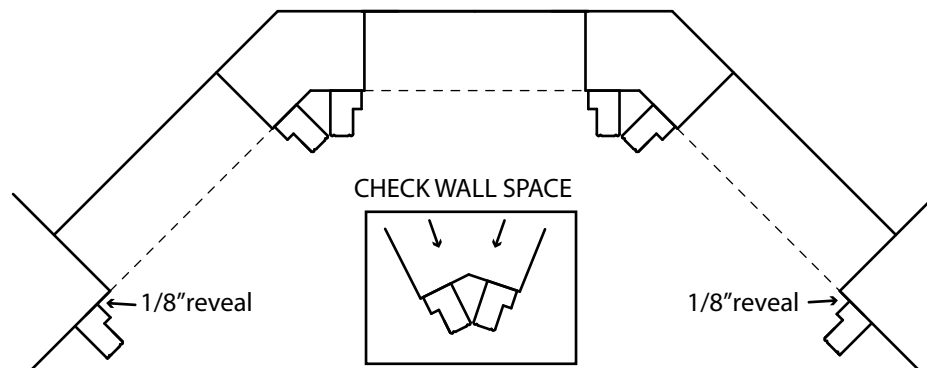


## Bay window with Z-frame semi inside mount mitre cut

If there is not enough wall space for a standard Z-frame semi inside mount as on the previous page, the shutter can be made with a standard factory miter cut at 135° to reduce the size of the flange for easy installation.



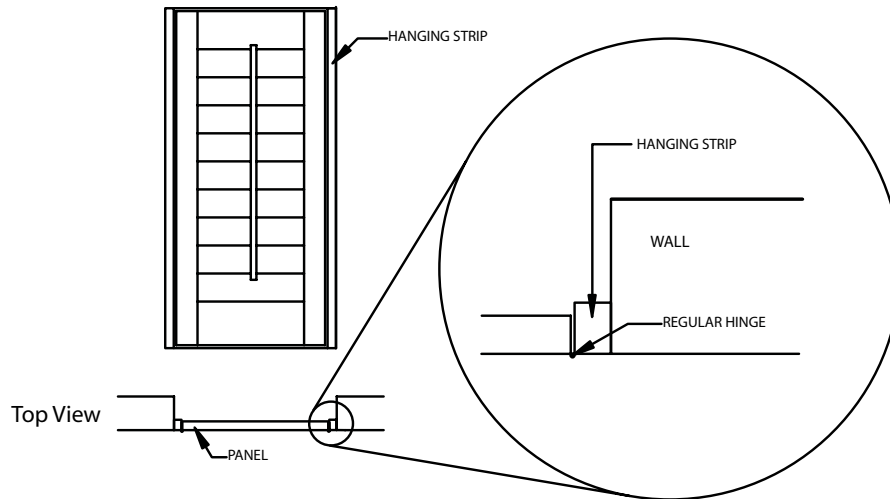
Outside mount bay windows look great with shutters. While uneven walls are more easily accommodated with inside mount Z-frames, outside mount frames are a viable option when space limitations preclude inside mount frame clearances. For a clean design we recommend that the sills be surrounded with a four side frame and notched on the job. A four sided frame could also sit on top of the sill.



## Hanging Strip

### Side Mount Hanging Strip

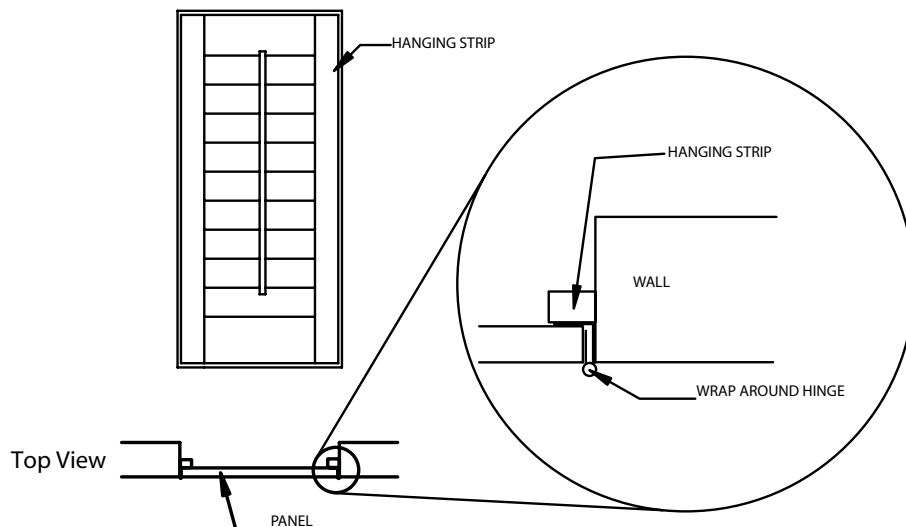
Shutters mounted with a hanging strip on the side use the standard non-mortised hinge. The factory will provide a hanging strip for both sides and a light block for the top and the bottom. For each panel, two magnets and a regular hinge are included. (The hinges are attached to the panel at the factory, however hanging strips, light blocks, and magnets come separately)



Lexwood Hanging Strip: 1" x 1 3/8"  
 Polycore Hanging Strip: 1" x 1 3/4"

### Rear Mount Hanging Strip

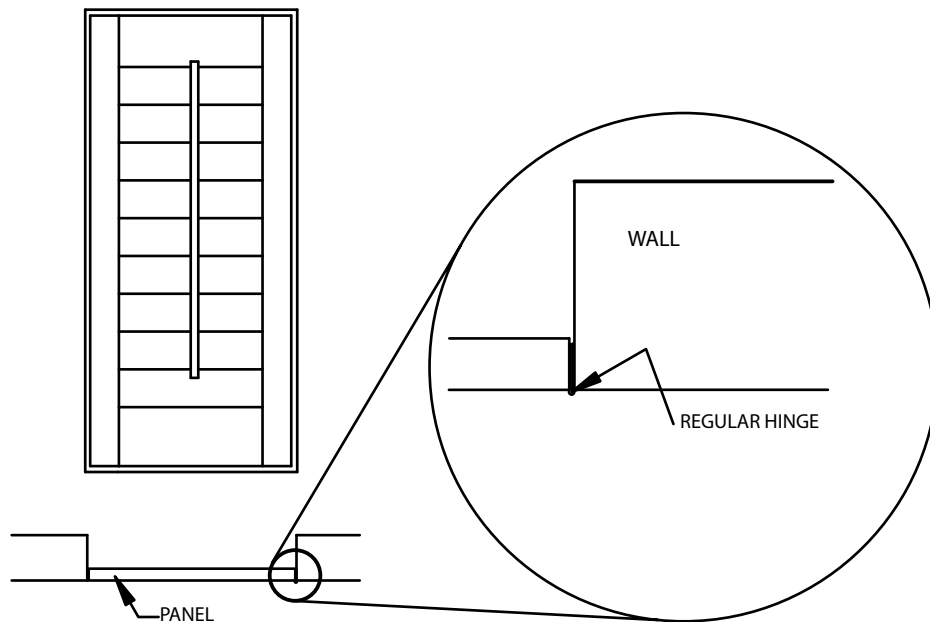
Shutters mounted with a hanging strip behind use the non-mortise **wrap around hinge** and factory deductions are once again the same as a direct mount shutter. The factory will provide a hanging strip for both sides and a light block for the top and bottom. For each panel, two magnets and a wrap around hinge are included. (The hinges are attached to the panel at the factory, however hanging strips, light blocks, and magnets come separately)



Lexwood Hanging Strip: 1" x 1 3/8"  
 Polycore Hanging Strip: 1" x 1 3/4"

## Direct Mount Shutters

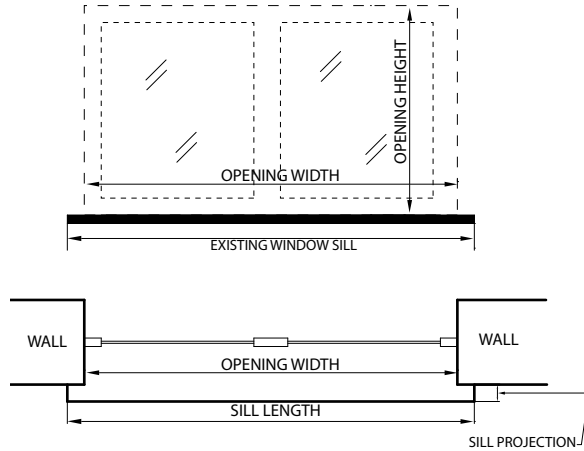
Direct mount shutters are hinged to jam with no frame or hanging strip. If you order a direct mount shutter with opening dimensions, the factory will deduct 1/4" for Polycore and 1/8" for Lexwood from the height and 3/16" in width for both. Multiple panels will have a 1/4" deduction on width. Magnets and light blocks for four sides are not attached.



\* Please remember that our Polycore stile cap is not included in the Net Panel size measurement. The stile caps as the bottom margin.

## Sill Cap

Sill cap is designed to cover the existing window sill to give a shutter a consistent look. This application is available on Lexwood and Polycore shutters. When you choose this application, must be aware of following situations: We default the finished sill cap length 1 1/4" wider than the existing window sill each side. Please refer to the frame overlap table on page 30, to determine the best edge of the sill cap. (There is a surcharge for sill cap).



When you order with opening size, please make sure the finished shutter frame will stay within the finished sill cap. Please see right side illustration for example. It is very important to make sure the finished sill cap is long enough to meet the frame. We build still cap base on your provided window still length. Please advise if you need additional length on the sill cap.

Right side - shutter frame is perfectly within the sill cap. Left side - shutter frame extends past the sill cap that creates a drop. In this case, you would need to request extra length to avoid the drop. Please advise upon order.

When you order with NWF size, please make sure not only the sill cap fits existing window sill, the shutter has to fit the window opening, too. Please see right side illustration for example. It is very important make sure the shutter will fit the window opening not only line up with the sill cap. NWF height is from top of existing window sill to top of shutter frame.

Right side - shutter frame is perfectly semi-inside mounted in the window opening and it also falls within the sill cap. Left side - sill cap fits the existing window sill perfectly, but the shutter is too wide to fit in the window opening.

